Google aims to use AI to help recognize common skin conditions
19 May 2021, by Sarah Katz

This AI—operated dermatology technology stemmed from Google research teams' realization of how many users ran a daily search on skin conditions using reference photos from Google Images. Additionally, a shortage of dermatology specialists poses a challenge for the two billion people annually impacted by skin conditions worldwide.

However, because using only words to describe a skin condition can be difficult, Google decided that many users could benefit from an option besides an Internet search. Therefore, this new tool runs on a web-based application that requires only three photos of your skin's affected area. Along with the processing of these photos, the app will also ask users how long they have had the issue as well as any additional symptoms to help narrow down the possible conditions. From that point, the AI draws on its knowledge of 288 skin conditions to propose potential matches that you can then research further.

Provided the many uses of AI for healthcare—from breast cancer diagnosis to better detecting tuberculosis—Google plans to use artificial intelligence to help users learn more about common skin conditions. When combined with technology such as smartphones, this kind of medical knowledge can really improve the way individuals understand their own health.

Google's I/O team has just released a preview of a new AI tool that keeps users informed on the state of their own skin, hair and nails. As the human body's largest organ, the skin poses an area of great interest as far as determining one's overall health condition. For this technology, Google uses many similar techniques used to identify diabetic eye disease and lung cancer via CT scans. By using a camera to capture an image of a user's skin, the tool can suggest diagnosis for certain ailments, such as a rash.

For every condition matched, the app will display a dermatologist-reviewed description and responses to frequently asked questions, as well as similar images from the Web. While this app should not replace a visit to an actual dermatologist, Google hopes the tool can provide some basic information that will help users determine their next steps in treating their skin ailment.

This tool will launch later in 2021 and will be programmed to assess across all ages, races, skin tones and types as well as sex. Currently, the app is equipped to draw upon 65,000 images and case data of diagnosed skin conditions, examples of skin condition searches and thousands example photos of healthy skin.

More information: Bui, P., and Liu, Y. "Using AI to Help Find Answers to Common Skin Conditions." Google, 18 May 2021, blog.google/technology/health/...ogy-preview-